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DEPARTMENT OF NATURAL RESOURCES

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Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

May 24, 2016

Scott Bakken
Energy Fuels Resources (USA)
225 Union Boulevard, Suite 600
Lakewood, Colorado 80228

Subject: Second Review of Revised Reclamation Cost Estimate, Energy Fuels Resources (USA), Daneros Mine, S/037/0121, San Juan County, Utah

Dear Mr. Bakken:

The Division of Oil, Gas and Mining has reviewed the referenced draft reclamation cost estimate that was received March 9, 2016. The attached comments will need to be addressed before the Division can approve the estimate.

After the cost estimate is determined complete, the Division will ask that Energy Fuels submit any additional surety required for escalation to 2020 dollars. Please submit your response to this review, and the other pending reviews for La Sal/Snowball (M/037/0026), Pandora (M/037/0012), Energy Queen (M/037/0043), Rim-Columbus (M/037/0006), by June 30, 2016.

Please contact the lead for this project, Mike Bradley, at 801-538-5332, the surety engineer, Wayne Western, at 801-538-5263, or me at 801-538-5261 if you have questions about the review or if you would like to schedule a meeting to discuss the comments. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker
Minerals Program Manager

PBB:mpb:pb

Attachment: Review; UDEQ Hazardous Waste information; Boart Longyear spreadsheet

Cc: Ted McDougall, BLM Monticello FO (tmcdougall@blm.gov)

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**INITIAL REVIEW OF SURETY ESTIMATE
TO COMMENCE LARGE MINING OPERATIONS
Energy Fuels Resources (USA), Daneros Mine, S/037/0121
May 24, 2016**

General Comments: (No specific responses required)

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1	General	The Division may have additional comments based on the responses to this review. Please attempt to provide a complete, technically adequate submittal.		
2	General	While developing reclamation cost estimates, the Division must assume the site will be left in a worst-case scenario with the Division having to conduct the reclamation with State-approved contractors in the absence of the operator. Please develop the reclamation cost estimate with this understanding.		
3	General	The reclamation cost estimate must take into account compliance with all applicable rules and regulations pertaining to worker and public health and safety, and the remediation, handling and disposal of regulated hazardous wastes. The Division is not exempt from complying with these statutes in the event it must undertake the reclamation. These rules include, but are not limited to: R307 (DEQ, Air Quality), R313 (DEQ, Waste Management and Radiation Control), R315 (DEQ, Waste Management), and R317 (DEQ, Water Quality).		

R647-4-113 – Surety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
4 (Rev1, #12)	Water Well Closure	<p>PREVIOUS: Include a cost for mobilization of appropriate equipment capable of abandoning a 7" water well at 1,660' deep.</p> <p>Operator response: <i>"The cost of contractor mob/demob (including drill rig) is estimated to be \$2,500 and this has been included in the overall project mob/demob costs."</i></p> <p>NEW: A quote the Division received from Boart-Longyear on May 12, 2016, for a rig to mobilize to plug and abandon a 7-inch well up to 1,600 feet deep and within 50 miles of the shop is \$12,000.00. A copy of the B-L spreadsheet is included. Similar costs would be expected for a drill rig originating in Moab, though it would likely be more due to the longer mobilization distance (~150 miles). Please adjust this estimate accordingly.</p>	mb	

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
5 (Rev1, #15)	Hazardous Materials	<p>PREVIOUS: Please include costs for pre-demolition building surveys for asbestos and universal hazardous wastes as required by NESHAPS and Utah DAQ / DEQ Operator response: <i>"The mine shop and office trailer were constructed/purchased new in 2008 and 2009. EFR believes that testing is unnecessary due to the age of the buildings."</i></p> <p>NEW: Rule R307-801-9 requires a pre-demolition building inspection for asbestos, regardless of the age of the building. A survey of universal hazardous wastes is recommended to be included in the inspection. universal hazardous wastes include household items like HVAC thermostats with mercury switches, mercury vapor and fluorescent lights, lead-acid batteries, PCB light ballasts, CFC-containing HVAC/refrigeration units, etc. A guidance document published by Utah DEQ is attached for review.</p> <p>Supporting regulations include the National Emission Standards for Hazardous Air Pollutants (NESHAPs), OSHA 1910, 1915, & 1926 for worker protection, and the Toxic Substances Control Act (TSCA, 40CFR Part 763). At a minimum, please include the costs for conducting the pre-demolition survey of the main building on site. The previous submittal for the La Sal Mines Complex included a vendor quote from Terracon Consultants that also listed a quote for the Daneros building assessment of \$1,800. Please include that figure for this estimate.</p>	mpb	
6 (Rev1, #16)	Hazardous Materials	<p>PREVIOUS: Please include a cost estimate for removal and disposal of regulated hazardous materials on site.</p> <p>Operator response: <i>"None are expected."</i></p> <p>NEW: Without the required pre-demolition survey in hand, it is problematic to assume that no hazardous materials will be encountered during reclamation. Given the number and types of materials that are considered hazardous wastes requiring special handling and disposal, please include a contingency figure of \$2,000 for the survey.</p>	mpb	
7 (Rev1, #17)	Omission	<p>PREVIOUS: Include costs to remove generators and compressors, as needed. Operator response: <i>"All mobile equipment and fixed equipment is assumed to be in working order and to have salvage value...The salvage value has not been included in the bond estimate. However, the cost of disposing of these items has been assumed to be zero since they have value above and beyond the costs to remove them."</i></p> <p>NEW: See new comment 8 below.</p>	pnb	
8 (Rev1, #18)	Omission	<p>PREVIOUS: Include costs to remove significant underground mine equipment and machinery.</p> <p>Operator response: <i>"Please see comment #17."</i></p> <p>NEW: See comment 2. The Division cannot assume there is any salvage value for equipment or materials on site. The Division must anticipate that these items will need to be loaded or dismantled and hauled off site with no monetary compensation in return.</p>	pnb	

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
9 (Rev1, #20)	Earthwork, Calculation	<p>PREVIOUS: For a 2.5 cu yd LHD (ST-2D), please use costs from Blue Book 2015: \$3,830.00 monthly rate (176 hrs/month). The operating cost is \$30.00/hour. Add 10% to the rental rate and operating cost for overhead and profit. Use the Means labor rate of \$74.15 which includes overhead and profit. Please contact the Division for explanation of how to include overhead and profit.</p> <p>Operator response: (See EFR response document dated March 2016.)</p> <p>NEW: The Division of Oil, Gas and Mining does not operate under the same rules as DWMRC when calculating labor costs for reclamation. The Division has specific guidelines within which it must operate, which include contractor bidding requirements for reclamation. The Division's standard practice is to use R.S. Means labor rates since the Division must use State-approved contractors that may not necessarily reside in the Moab area. This allows the Division to apply bonding costs consistently with all mine operators in the state.</p>	whw/ mb	
10 (Rev1, #21)	Earthwork, Calculation	<p>PREVIOUS: For a D7 dozer please use costs from Blue Book 2015: \$15,875.00 monthly rate (176 hrs/month). The operating cost is \$76.20/hour. Add 10% to the rental rate and operating cost for overhead and profit. Use the Means labor rate of \$74.15 which includes overhead and profit. Please contact the Division for explanation of how to include overhead and profit.</p> <p>Operator response: "Please see comment #20."</p> <p>NEW: See comment 9 above.</p>	ww/m b	
11 (Rev1, #22)	Earthwork, Calculation	<p>PREVIOUS: For 966H please use costs for Bluebook 2015: \$8,250.00 monthly rate (176 hrs/month) operating costs \$58.70/hr, and 10% to the rental rate and operating cost for overhead and profit. Use Means labor \$74.15 which includes overhead and profit. Please contact the Division for explanation of how to include overhead and profit.</p> <p>Operator response: "Please see comment #20."</p> <p>NEW: See comment 9 above.</p>	pnb	